Lithologic Log Addendum

Well BLM-25-455

Cuttings of the lithologic unit from well BLM-25-455 were sent to the Department of Geological Sciences, New Mexico State University (NMSU), Las Cruces, New Mexico, for detailed petrographic analysis when identification of fine-grained, highly altered volcanic rocks at the NASA-WSTF site became difficult using conventional field methods. Petrographic reports from NMSU were received after the printing of these lithologic logs, hence the need for this addendum. The petrographic description from NMSU is included below.

Previous unit name based on field identification: **Tuff**

New Unit name based on petrographic analysis: **Porphyritic Rhyolite**

BLM-25-455 (485' - 490')

Porphyritic alkali rhyolite

Origin:	lava flow or dome
Texture:	aphanitic porphyritic
Phenocryst mineralogy:	sanidine + quartz
Porosity:	none
Alteration:	none

Approximately 15% phenocrysts are present in a devitrified matrix of feldspar and quartz. Sanidine phenocrysts (11%, 0.5 to 1.5 mm) are subhedral to euhedral. Quartz phenocrysts (4%, 0.3 to 2 mm) are anhedral, rounded, and embayed. Trace amounts of orthopyroxene, zircon, biotite (gold to red-brown pleochroism), and FeTi oxides are present as microphenocrysts. Porosity and alteration are minimal to non-existent. The sample probably originated as a rhyolitic lava flow or dome.